

National Pollutant Discharge Elimination System (NPDES)

Program Overview

The History of MS4 Permitting Regulations

- In 1972, Congress amended the Federal Water Pollution Control Act (Clean Water Act) to prohibit the discharge of any pollutant to waters of the U.S. from a point source discharge unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit.
- A permit is a license
 - Issued by the government
 - Granting permission to do something that would be illegal in the absence of the permit (e.g., driver's license)
 - There is no right to a permit and it is revocable for cause (e.g., reckless driving)
 - A NPDES permit is license to discharge

- In 1987, Congress amended the Clean Water Act to require implementation, in two phases, of a comprehensive national program for addressing stormwater discharges.
 - In 1990, EPA promulgated “Phase I” of the comprehensive national stormwater program by requiring NPDES permits for municipal separate storm sewer systems (MS4) serving a population of 100,000 or more.
 - In 1999, EPA promulgated “Phase II” of the stormwater permitting program by expanding it to include MS4 discharges from smaller municipalities (Small MS4s) in urbanized areas. Small MS4s were required to apply for coverage under the NPDES program prior to March 10, 2003. The original permit will expire December 9, 2007. This permit will replace it for the next five years beginning July 1, 2008.

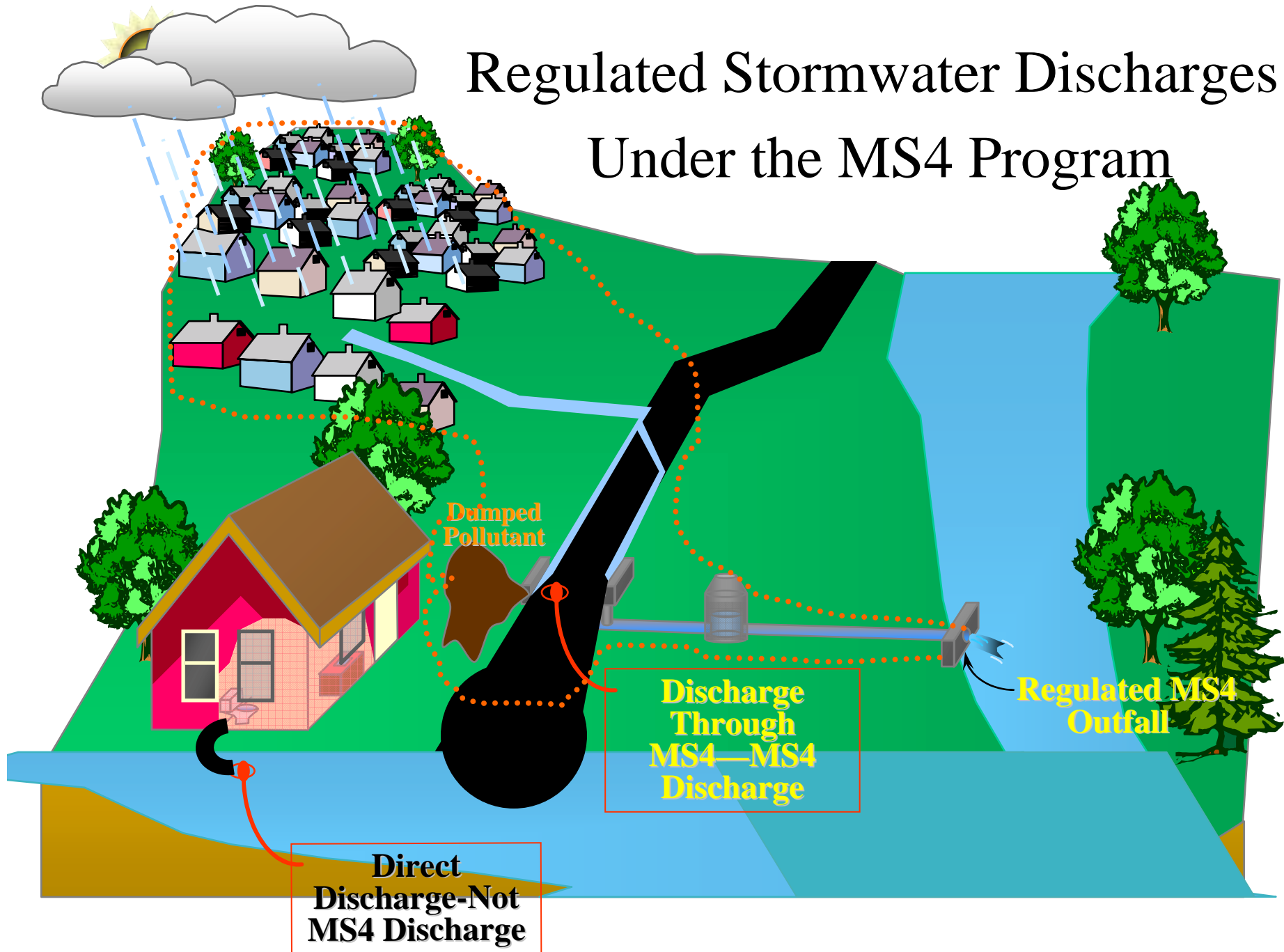
Key Dates

- **March 31, 1975**—Virginia authorized by EPA to issue NPDES permits.
- **April 4, 1991--**Virginia authorized by EPA to issue NPDES General Permits.
- **December 9, 2003** – DEQ, under Virginia Water Control Board oversight, issues VPDES General Permit for the Discharge of Stormwater from Small MS4s.
- **January 29, 2005** – DCR, under Virginia Soil and Water Conservation Board oversight, assumes regulatory authority over the MS4 regulatory program from DEQ. MS4s now regulated under the Virginia Stormwater Management Program (VSMP) permitting regulations.
- **December 9, 2007--** Original VPDES General Permit for the Discharge of Stormwater from Small MS4s set to expire.

MS4 Definition

- A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
 - (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body;
 - (ii) Designed or used for collecting or conveying stormwater;
 - (iii) Which is not a combined sewer; and
 - (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- “Today’s rule does not regulate the county, city or town. Today’s rule regulates the MS4. Therefore, ... if that county does not own or operate the MS4 systems, the county does not have to submit an application or develop a stormwater management program.” Federal Register: December 8, 1999, Volume 64, Number 235, Page 68750

Regulated Stormwater Discharges Under the MS4 Program



Discharges are authorized under either an individual or general permit

Individual Permit (11)

- One application submitted-One permit issued
- Appropriate where site-specific limits, management practices, monitoring and reporting, or other facility-specific permit conditions are needed
- Coverage valid for five years from date of issuance. Permittee given 5 years coverage.
- Required of Phase I MS4s. Phase II optional.

General Permit (105)

- One permit issued many applications submitted
- Appropriate where multiple dischargers require permit coverage, sources and discharges are similar, permit conditions are relatively uniform
- Permit must identify:
 - Area of coverage
 - Sources covered
 - Application process (Notice of Intent)
- Permit valid for five years from date of issuance. Permittee may not be given 5 years coverage during first permit cycle.

Technology-and Water Quality-Based Effluent Limitations

Technology

Goal: “Zero Discharge”
(Performance)

40 CFR §§122.44(a)&(e)

“Maximum Extent Practicable”

Water Quality

Goal: “Fishable/Swimmable”

40 CFR §§122.44(d)

TMDL WLA

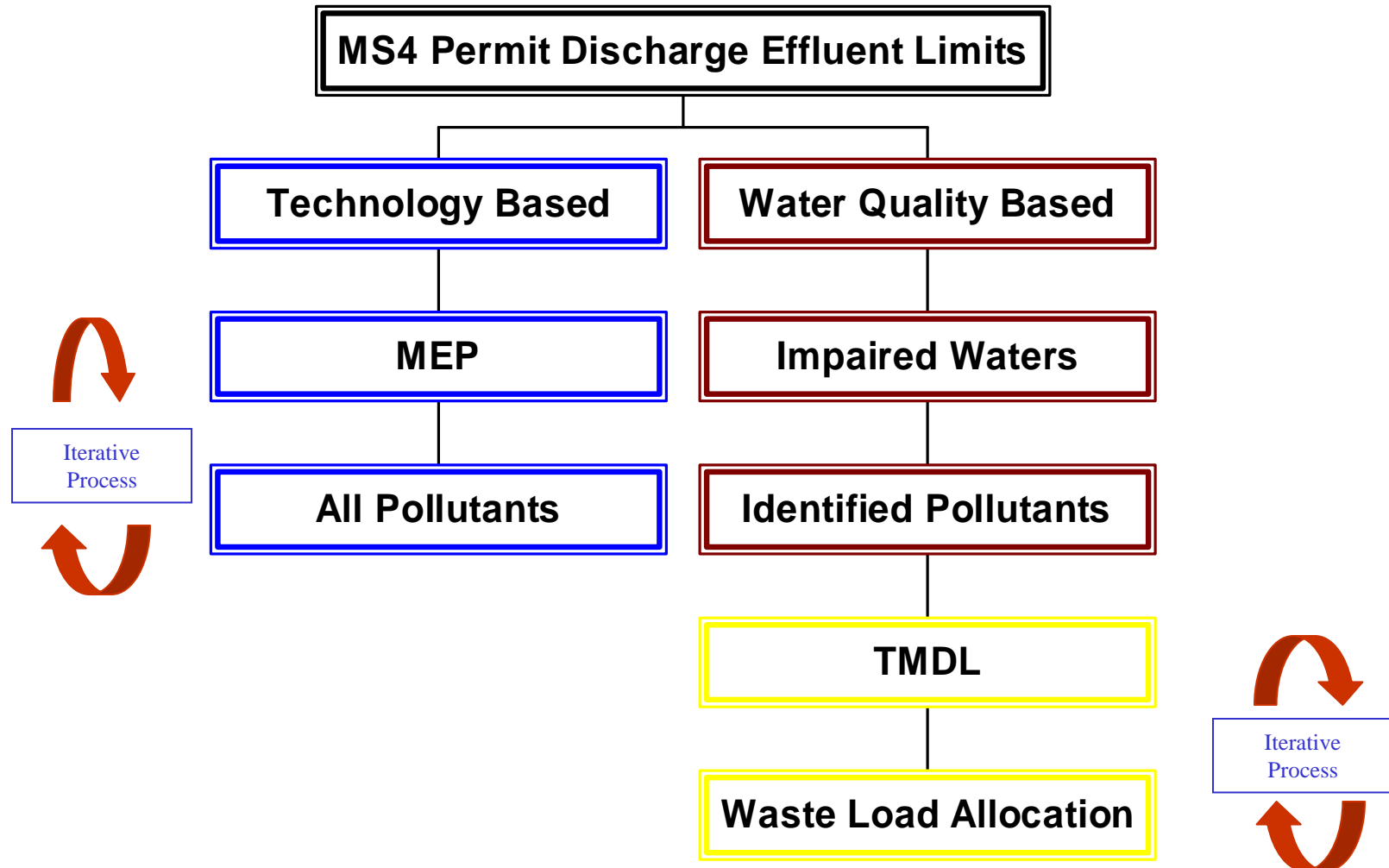
Relationship: Technology-based effluent limits are developed for all applicable pollutants of concern. If these limits are not adequate to protect water quality, then water quality-based effluent limits must be developed.

**PER FEDERAL REGULATION: THE MOST PROTECTIVE
EFFLUENT LIMIT MUST BE INTEGRATED INTO NPDES
PERMITS**

Integrating Effluent Limits into Stormwater Permits

- Difficult to develop actual numeric discharge limits.
- Utilize Iterative Process approach to addressing pollutant load reduction.
 - Develop measurable goals
 - Implement Best Management Practices (BMPs)
 - Evaluate BMPs for effectiveness meeting measurable goals
 - Refine BMPs, if necessary to improve BMP effectiveness in meeting measurable goals
- Consistent with EPA's "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits."

MS4 Effluent Requirements



Summary of Small MS4 Regulatory Requirements

- Develop and implement a MS4 Program
- Designed to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act, State Water Control Law and the Virginia Stormwater Management Act.
- Implement six Minimum Control Measures
 - Public Education and Outreach on Stormwater Impacts
 - Public Involvement / Participation
 - Illicit Discharge Detection and Elimination
 - Construction Site Stormwater Runoff Control
 - Post-Construction Stormwater Management in New Development and Redevelopment
 - Pollution Prevention / Good Housekeeping for Municipal Operations
- Evaluate, Assess, Revise (as necessary) and Report